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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
CAPUTO, LISA M	
ART UNIT	PAPER NUMBER
2876	

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/843,946	CARLSON ET AL.	
	Examiner	Art Unit	
	Lisa M. Caputo	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 January 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) *10-14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 15-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Amendment

1. Receipt is acknowledged of the amendment filed 30 January 2006.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3 and 5-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Roustaei (U.S. Patent Application Publication No. 2002/0050518).

Roustaei teaches a sensor array. Regarding claims 1 and 6, Roustaei teaches a monolithic circuit chip having radio frequency (RF) communication capability, wherein the circuit chip (single computer chip 1900) comprises a complementary metal oxide semiconductor (CMOS) imager (CMOS image sensor 110), CMOS microprocessing circuits (logic processing unit 1930) for receiving image data from the CMOS imager and data from an RF receiver, an RFID reader (employed on silicon chip of Figure 22) and a memory (memory 160, further, ROM 4590) for providing non volatile data storage on the circuit chip. Regarding claim 2, Roustaei teaches that the shared circuitry on the circuit chip performs signal compression for both RF communication signals and data signals from the CMOS imager. Regarding claim 3, Roustaei teaches that the RF

receiver comprise an RF transmitter and images captured by the CMOS imager are communicated over an air interface using the RF transmitter (see Figures 19, 22, and 45, paragraphs 88, 98, 110, 145, and 168).

Regarding claim 5, Roustaei teaches that the chip further comprises interface circuitry for providing power and control signals to the CMOS imager and the RF receiver and for converting analog signals and analog image signals into digital signals, wherein the interface circuitry provides the digital signals to the microprocessing circuit when it is taught that there is a power management control unit 5580 and an analog to digital converter ADC 5520 that is used with the sensor 110 integrated on chip 82 (see Figures 5 and 55, paragraphs 100-102 and 155).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roustaei in view of Rousteai et al. (U.S. Patent Application Publication No. 2001/0034222, from hereinafter "Roustaei et al."). The teachings of Roustaei have been discussed above.

Regarding claim 4, the primary Roustaei reference fails to teach that the RF receiver operates in accordance with a radio access protocol selected from the group consisting of Bluetooth, IEEE 802.11 and HomeRF.

Roustaei et al. teaches an image capture and processing accessory. Roustaei et al. discloses that FIG. 14 shows a further embodiment of an image capture system 120 in accordance with the present invention. In this embodiment, the imager 111 is physically separate from the cellular phone 121 having a wireless connection between the two. This wireless connectivity can be provided by a communications link based on the Bluetooth protocol. The imager includes an image sensor 112, light source 113, an optional activation button 114, and an antenna 115 used for a short wireless connection between the imager 111 and cellular phone 121. The cellular phone 121 includes a display window 122, a keypad 123, a speaker 125, a microphone 126 and an antenna 129. Through the antenna 129, control signals are transmitted to the imager 111 and image signals are received from the imager 111 for transmission on the wireless network. The antenna 129 is also used to receive and transmit signals on the wireless network. In a further arrangement, a separate transmitting/receiving unit could be plugged into the cellular phone 121 to communicate with the imager 111 (see Figure 14,

paragraph 50). Hence, Roustaei et al. teaches that Bluetooth is a well known and conventional radio access protocol.

In view of the teaching of Roustaei et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the use of Bluetooth communications because Bluetooth is a cost efficient and favorable way to transmit data (i.e. data is able to be sent and received in a timely manner).

5. Claims 7-9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roustaei. The teachings of Roustaei have been discussed above.

Regarding claims 7-9, Roustaei does not specifically teach that the memory is a ferroelectric random access memory, a flash memory, or an EEPROM memory.

However, Roustaei does indeed teach that memory 160 may be any form of memory suitable for integration in a chip (see page 6, paragraph 98, lines 13-15). Further, regarding claim 7, Rousteai teaches that the processor unit 5575 may also include associated memory devices such as ROM or RAM memory (see Figure 55, paragraph 155). In addition, regarding claim 8, Roustaei teaches that there is space available for removable flash memory cards within the system (see Figure 20, paragraph 167). Hence, Roustaei teaches that well known, art recognized equivalent memories are able to be used within the system.

In view of the teaching of Roustaei, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use one of the enumerated memories because these memories are conventional and well established memory devices that are able to perform their tasks well (i.e. store information efficiently).

Regarding claim 15, Roustaei teaches a method of communicating image information using a monolithic circuit chip comprising the steps of capturing a digital image, processing the image by a processor using a memory, equipping the monolithic circuit chip with an RFID reader for reading an RFID tag, and transmitting by radio frequency transmitter, the processed image over an air-interface, wherein the digital imager, processor, and radio frequency transmitter are formed on the monolithic circuit chip (see Figures 19, 22, and 45, paragraphs 88, 98, 110, 145, and 168).

Regarding claim 15, Roustaei fails to teach that the memory is a ferroelectric memory.

However, Roustaei does indeed teach that memory 160 may be any form of memory suitable for integration in a chip (see page 6, paragraph 98, lines 13-15). Further, Rousteai teaches that the processor unit 5575 may also include associated memory devices such as ROM or RAM memory (see Figure 55, paragraph 155).

In view of the teaching of Roustaei, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use one of the enumerated memories, including the ferroelectric memory, because these memories are conventional and well established memory devices that are able to perform their tasks well (i.e. store information efficiently).

6. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roustaei in view of Tomer (U.S. Patent No. 6,243,029). The teachings of Roustaei have been discussed above.

Regarding claims 16-18, Roustaei fails to teach that the imaging method is in the environment of a parking lot, and further, that parking spaces are imaged and a determination is made regarding billing for the space.

Tomer teaches a parkulator photo parking system. Tomer discloses that the invention also includes the imaging device for imaging a vehicle with unique indicia located in a toll parking location. The device has a means for imaging a vehicle unique indicia, and optical character recognition means for digitizing the unique indicia image. A storage means for retaining the digitized image of the vehicle unique indicia is contained in the device. A transmitting means for communicating the digitized image of the vehicle unique indicia to the remote central control unit, and a receiving means for obtaining data from the remote central control unit, is also contained in the device. Also present in the device is a means for producing a visual image of a vehicle unique indicia, and in a further embodiment, means for printing a ticket document used for levying a fine for toll parking violation (see col 2, lines 39-52).

In view of the teaching of Tomer, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ an imaging system in the environment of a parking lot because it is favorable to be able to automatically monitor a parking space by images, rather than human power, in order to be cost efficient and effective (i.e. the image is saved and is able to reviewed repeatedly for correctness). In addition, it is appropriate to combine Tomer with Roustaei because Tomer is teaching, at its core, an imaging system like Roustaei, but in addition, teaches the limitations of utilizing the image system for a parking space, which Roustaei does not teach.

Response to Arguments

7. Applicant's arguments filed 30 January 2006 have been fully considered but they are not persuasive.

8. In response to applicant's argument that Roustaei does not teach the newly claimed limitation of the monolithic circuit chip having an RFID reader employed thereon, examiner respectfully disagrees and submits that Roustaei does indeed teach of radio frequency communication being utilized on the chip, which includes transmitting, receiving, and hence the ability to read as well as seen in paragraph 168 which discloses the use of radio frequency on a silicon chip.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ***Lisa M. Caputo*** whose telephone number is **(571) 272-2388**. The examiner can normally be reached between the hours of 8:30AM to 5:00PM Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached at **(571) 272-2398.** The fax phone number for this Group is (571) 273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to **[lisa.caputo@uspto.gov]**.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LMC
April 15, 2006

THIEN M. LE
PRIMARY EXAMINER